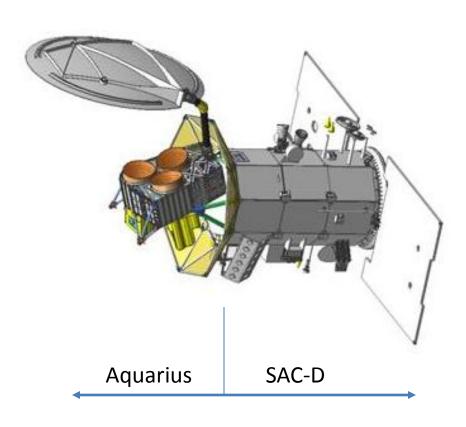
Status of Aquarius/SAC-D

David M. Le Vine
Aquarius Deputy PI
Goddard Space Flight Center
Greenbelt, MD 20901

Aquarius/SAC-D



Instrument

- L-band
- Radiometer and Radar
- 3 Beam Pushbroom
- Polarimetric

Mission

- Sun-synch orbit 6 am/6pm
- Night time look
- 675 km Alt; 7 day revisit

Science

- Global maps of Sea Surface Salinity
- Accuracy: 0.2 psu; 150 km; monthly
- Seasonal and annual variations

Partnership

- CONAE (Argentina): Spacecraft (SAC-D)
- NASA/GSFC: L-band radiometer
- NASA/JPL: L-band scatterometer

Aquarius/SAC-D Instruments

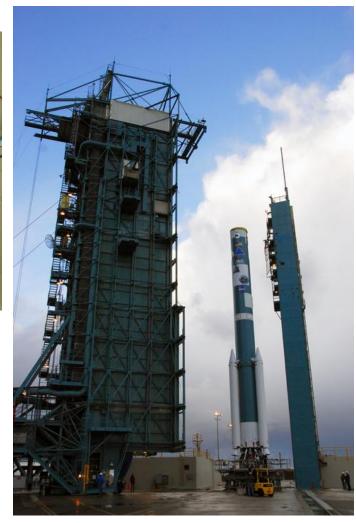
| Instrument | Objective | Description | Resolution | Source |
|--|---|--|-------------------------------------|------------------|
| Aquarius | Sea Surface Salinity (SSS) | Radiometer (1.4 GHz) Radar (1.26 GHz) | 76x 94 km 84x120 km 96x156 km | NASA |
| MWR: Microwave Radiometer | Precipitation; Wind speed; sea ice | 23.8 and 37 GHz 390 km swath | 40 km | CONAE |
| NIRST: New Infrared Sensor Technology | Fires, Sea Surface Temp | 3.8, 10.7, 11.7 µm 180 km swath | 350 m | CONAE |
| HSC: High Sensitivity Camera | Urban lights; Fire detection | 450-900 μm 700 km swath | 200-300 m | CONAE |
| DCS: Data collection System | Environmental data collection | 401.55 MHz uplink | 2 contact/day 200 platforms | CONAE |
| ROSA: Radio Occultation Sounder for Atmosphere | Atmospheric Temp & humidity profiles | GPS occultation | 300 km | ASI (Italy) |
| CARMEN 1: ICARE & SODAD | Effects of Radiation space µ-particles & debris | Si/LI detectors and SMOS sensors | | CNES (France) |

Ready to Go! Launch: June 9 from VAFB



Aquarius/SAC-D ready to ship to VAFB after environmental testing (March, 2011).

Assembly of Delta-II rocket, VAFB



Information

- General Information:
 - http://aquarius.gsfc.nasa.gov/
- Specific Information and Data Products:
 - http://oceancolor.gsfc.nasa.gov/AQUARIUS/
- Media Releases
 - http://www.nasa.gov/topics/earth
- Pictures:
 - http://mediaarchive.ksc.nasa.gov/search.cfm?cat=228
 - http://countdown.ksc.nasa.gov/elv/index-vafb.html